

A search for two of America's rarest conifers

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The family called TAXACEAE, or yew family, contains about twelve genera and nearly 100 species, yet only five species are indigenous to the United States. Of these five species, two are native to the Pacific coast region; one, *Taxus canadensis*, is found in the Northeast; while the other two, *Taxus floridana* and *Tumion taxifolium*, much rarer and more localized in their distribution, are found along the east side of the Apalachicola River, in Florida.

Check-lists and works on the distribution of conifers give little specific information as to the location of these rare trees. For instance, files in the U. S. Department of Agriculture at Washington still state that *Taxus floridana* is found from "Aspalaga to the vicinity of Bristol"; yet Aspalaga, which appears once to have been a more or less flourishing bluff-settlement and boasted a ferry across the river, has been entirely off the map for some twenty-five years and is today nothing more than a memory. Indeed, even if it were possible to state the exact locations of the various groups of these trees, the locations would be untenable for very long. Botanists have been exploiting them on a small scale, but the chief exploitation has been in the hands of manufacturers of bows and arrows. The wood of this tree is smooth, close-grained, hard, flexible and durable, and is therefore ideal for making bows.

Tumion taxifolium, which is the more common of these two conifers, is not so difficult to find since its range is longer and more continuous than is that of *Taxus floridana*. In fact, there is a group of the former which can be reached just off the Florida State highway where it crosses the Apalachicola River at River Junction; and its range extends over the State boundary into Decatur County, Georgia. *Taxus floridana*, on the other hand, is now almost extinct in its native habitat and is known to be growing in only a few isolated places within its limited range.

Inquiries revealed to the authors the location of one or two scattered groups of yew, but it was from Mr. D. H. Ward of Bristol, County Agent of Liberty County, that we managed to locate a grove where both yew and tumion were growing to-

gether. Mr. Ward gladly agreed to serve as guide for us. So, having completed arrangements for the trip, we set out at day-break on a Saturday morning in late April.

After motoring several hundred miles, we arrived about noon at Blountstown, Florida. Here we crossed the broad, peaceful, muddy waters of the Apalachicola on an obsolescent ferry, and hurried on to Bristol.

Mr. Ward met us with a cordial welcome, told us that he had been awaiting our arrival and that he was ready to accompany us. It was indeed fortunate that we were able to secure him as our guide, for had it not been for him we would never have been able to locate the trees we were looking for.

It was a matter of only a few miles' drive to the site of the trees. Over a little-travelled, sandy country road, bordered for the most of the way by a scant low growth of "black jack" oaks interspersed with pines, we rode until stopped by a wire fence which blocked the faint outlines of the old and almost forgotten roadway. Stopping our car near the fence, we proceeded on foot, ever watchful for any sign of the trees we sought.

For a short distance we followed a brook which flowed sluggishly along under a dense canopy of magnolias, sweet-gums, and underbrush. Then, on emerging into the open, we went along a cattle-trail that wound across a broad field, quite free of vegetation except for patches of grass and an occasional live-oak, but dotted everywhere with gopher holes. When we next entered the woods we came upon a wide ravine some forty or fifty feet deep with almost precipitous sides. It was here, on a steep side of this ravine, that we first sighted tumion; and it was up and down the side of this long ravine that we later found more and more tumion and eventually a few dozen yews.

The symmetrical and gracefully-drooping tumion ranged in size from small plants not more than a few inches high to middle-sized trees twenty feet tall; and dominated the landscape. In both form and foliage they are so different from other trees growing thereabout, the yew excepted, that one almost loses sight of everything but of them. A lover of trees surely cannot help being impressed by their unusual growth and beauty.

Clambering up and down the steep cliffs, on the thick carpet of leaves of which we slipped and fell innumerable times, we wandered through scores of tumion trees before catching

our first glimpse of yew. In mature specimens it is usually easy enough for a person to distinguish the two genera, inasmuch as their manner of branching is distinct; but in small plants the similarity is often so close that at a distance they appear, especially to those unfamiliar with them, one and the same.

Botanically speaking, Florida tumion and Florida yew are closely related. Both are evergreens of the same family, although of different genera. Neither is very tall-growing, but specimens of tumion have been known to grow some forty feet in height. They both have rather broad, linear, pointed leaves $\frac{3}{4}$ to $1\frac{1}{2}$ inches long. The seed of each is a drupe, covered with flesh. And their bark is scaly or fissured and not decidedly different in color. However, Florida tumion grows in an open pyramidal shape, with its branches disposed in tiers like the araucarias and especially like the California-nutmeg; whereas Florida yew is more rounded, and when compact it is not very unlike English or Japanese yew.

The surest means of distinguishing the two plants is in one or both of two ways. Simply grasp a branchlet carefully, and if it pricks you as though it were a tier of needles, you can be assured it is Florida tumion, for Florida yew is as soft to the touch as hemlock. If, however, your hands are tough and your decision uncertain, pull off a few leaves, rub them between your fingers, and if they emit a pungent odor like bruised red pepper, you may bet you last dollar that the tree is none other than tumion; which, because of its characteristic odor when bruised, is sometimes called stinking cedar.

Having accomplished his work of guiding us to where the trees were growing, Mr. Ward returned to Bristol after wishing us goodnight. However, we had come prepared to spend the night, and as dusk was slowly setting in by this time, we at once began to hunt for a suitable camp-site. Our first thought of course was of water, and we were not long in finding some. By retracing the steps which we had followed along the brook earlier in the afternoon, we soon came to a small cataract. Although the water here, as elsewhere along the stream, was very shallow, nevertheless we dug at the base of this cataract a basin large enough for our needs and left it long enough to allow the mud to settle and the water to become clear. In the meantime we brought our car as near as possible to the water-basin.

The evening air was crisp but not cool enough for a fire. Nevertheless, we expected a swarm of mosquitoes as the evening progressed and so we collected a supply of light-wood knots and built a slow fire under a log. Thus, we soon had a fire which required little replenishing and the smoke from which, happily enough, kept away from us those troublesome insects that soon could be heard on all sides as they buzzed their unholy tunes in the surrounding shadows.

Besides being moderately weary from our exertions of the day, we planned to rise early next morning and so went to bed early. Our bed-covering was brought along with us, but to make sleeping more comfortable we gathered a big pile of Spanish moss, which formed the foundation of our bed.

Next morning we rose at daybreak, had a quick breakfast, and set out for the ravine. It was a delightful place. It seemed as if we had stepped into an exotic paradise, or rather into a huge greenhouse. The atmosphere was warm and humid, and the dew was dripping gently from the trees all about us.

Besides a spade, a bucket, and an axe, we had also brought with us a quantity of burlap for balling the plants. It was our desire to get well-shaped, small plants of a foot or so in height rather than larger specimens, for the smaller a plant is, generally speaking, the more easily and successfully it can be transplanted.

We soon found that we were going to have a busy morning. We made our way through the grove and selected the specimens we were to take back with us. The soil there was unusually well-drained both because of its large content of sand and because of the sloping sides of the ravine. We had a long trip ahead of us and as the weather in Florida at that time was dry and warm we felt that it was necessary for us to water thoroughly each specimen we dug up so as to prevent it from drying out.

The closest water supply was in the bottom of the deep ravine. As I have said before, it was a big job to climb the steep, slippery sides even empty-handed, but with a bucket of water to fetch up, it was obviously even more difficult. One by one, however, we got them dug, burlapped, and watered, so that by noon we had succeeded in getting some fifteen specimens. We were now ready to stop work.

Soon afterward we were on our way home, and with us we brought our little treasure of young trees. These were added to

our private collection of conifers. It had been a pleasant undertaking and we felt, as we rode away, that we had been fully repaid for the effort and time which we had spent on it.

Three months after being transplanted, these specimens, with the exception of four or five, appear to be in good health. They seem to prefer a peaty soil and undoubtedly they thrive best in a shady or partially shaded location.

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